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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,310	12/26/2001	Robert A. Wolff	C01-009	2747
23459	7590	02/07/2006	EXAMINER	
ARTHUR J. O'DEA LEGAL DEPARTMENT COGNEX CORPORATION ONE VISION DRIVE NATICK, MA 01760-2077			SETH, MANAV	
			ART UNIT	PAPER NUMBER
			2625	
DATE MAILED: 02/07/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/036,310	<b>Applicant(s)</b> WOLFF ET AL.	
	<b>Examiner</b> Manav Seth	<b>Art Unit</b> 2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-15,17-21 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-15,17-21 and 23-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Continued Examination Under 37 CFR 1.114**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 13, 2005 has been entered.

### ***Response to Amendment***

2. Applicant's amendment filed on December 13, 2005 has been considered and entered in full.
3. Applicant's amendment to the claim 17 has been entered and based on the amendment the objection on claim 17 has been withdrawn.
4. Applicant's arguments with respect to respective amended claims have been considered but are not persuasive. See the detailed discussion in section entitled "**Response to Arguments**".

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-5, 11, 12, 18, 19, 20, 21, 24, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over, Anderson U.S. Patent No. 6,567,122, further in view of Luster, U.S. Patent No. 5,715,051.

**Claim 1** recites “an image apparatus having an image element connected to a processing element and memory”. Anderson discloses in lines 5-8 and lines 40-45 of column 6 an imaging apparatus (digital camera) that consists of an image element connected to the computer (118, figure 1) built internally that consists of a processing element (344, figure 3) and a memory (346).

Claim 1 recites “a software process for transmitting, in a web-browser compatible form, the image data and information from the machine vision tool into the web-browser compatible form for transmission over a communication interface, interconnected to the processing element, to a human/machine interface device having a display, the web-browser-compatible image data and information being adapted for display on the human/machine interface device”. Anderson discloses in lines 27-37 of column 8, lines 14-18 of column 10 and lines 41-56 column 12, also teaches of a **web server (figure 9)** and software process responsible for compressing and reformatting the image data and information into a web-browser-compatible form for transmission over a communications interface, interconnected to the processing element, to a human/machine interface device having a display, the web-browser-compatible image data and information being adapted for display on the human/machine interface device

Claim 1 recites “wherein the human/machine interface is adapted to display the web-browser-compatible image data and the information on a plurality of user-selected screens associated

with machine vision tool, the screens being constructed and arranged for selecting function for at least one of installing, configuring, training, monitoring, and controlling the machine vision system". Anderson teaches in lines 34-38 of column 9 that a human/machine interface device can be a personal computer, wireless PCS phone or a network computer and apparently these devices are capable of displaying image data and information in web-browser-compatible image format. Anderson further teaches **"In addition, camera 100 is accessed via the widely used, very familiar web browser. By functioning with a web page based interface and widely used web browsers, the present invention provides a simple, intuitive, and familiar interface for accessing camera 100's functionality. Accordingly, camera 100's controls and functions are intuitively easy to utilize. Since web pages and their associated controls (e.g., push buttons, data entry fields, etc) are very familiar to most users, the remote access functionality of camera 100 can be utilized without requiring a extensive learning period for new users....."** (lines 45-64 of column 10) and **"Whereas and unauthorized user attempting access might receive an appropriate message (e.g., an "access denied" web-pages), an authorized user would see a web page representative of the functionality of the camera. The web page could include, for example, control buttons for camera control, images, or the like"** (lines 60-65 of column 13) which clearly shows that the webpage consists of control buttons where the web page is located at a remote location on a human/machine interface device which can be further used to control the camera by sending control data to the camera which further would make it obvious for a person of ordinary skill in the art to not only control the camera through remote access but **also perform other operations such as installation, configuring, training, etc of software on camera** as camera recites all the necessary elements for the specified purposes and the web page

technology as well known is known to incorporate the buttons to specify a separate operation on the camera.

Claim 1 recites "the processing element is adapted to perform a machine vision tool task while the human/machine interface device is disconnected from the communications interface". Anderson discloses in lines 46-55 of column 5 discloses that the image data and information can be transferred to human machine interface device at any time which makes it apparent that processing element can perform operations independently of the connection to the human/machine interface.

Claim 1 further recites "wherein the processing element includes a web server to allow the human/machine interface to setup and control the processor". Anderson discloses "As described above, **the remote accessibility of camera 100** provides for many new applications of digital imagery. One such application involves setting up camera 100 at some remote location and using it to take pictures at successive intervals. These pictures would be accessed via the Internet as they are taken. The interval can be adjusted (e.g., more or less pictures per minute) in response to user 720 entered commands via a Web browser" (col. 10, lines 57-64). Anderson further discloses "the user can modify the parameters of the application program executing within the camera" (col. 15, lines 39-44). It is clear from the above disclosure that user remotely changes the parameters for camera setup to work according to modified parameters and thus controlling the camera processor in view of the camera processor setup to take the pictures at particular successive intervals.

Claim 1 recites "a machine vision tool for performing a machine vision process on the image data". Anderson discloses multiple software processes (figure 9) that can be run on the processing element to control the functions and parameters of the camera in lines 52-55 of column 6, lines 1-4 of column 7 and lines 36-42 of column 15. Anderson discloses an image apparatus that is basically

the same as recited in claim 1 except that Anderson does not teach this image apparatus being used in machine vision systems.

However, Luster discloses a machine vision system in figure 7 and lines 34-67 of column 4, which includes a camera (30) coupled to a the image processing elements such as signal splitter (32), high pass filter (30) and image processing board (31). Luster further discloses the machine vision system further includes "input/output circuits to allow the system to communicate with external devices such as controller (not shown for controlling a motor such as stepper motor" (col. 4, lines 55-61). Luster further discloses "The machine vision system 40 may be programmed at a mass storage unit 60 to include custom controls for image processing and image analysis" (col. 5, lines 12-14). Luster further discloses that a host computer 62 of the system 40 may be a PC having sufficient amount of RAM and hard disk space for controlling the system (figure 7; col. 5, lines 15-17) which implies that the machine vision system can be controlled through a computer system that has hard disk and enough RAM. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Anderson in view of Luster. One would have been motivated to use the system of Anderson in machine vision applications as done by Luster because both references are directed to imaging and because Luster shows a specific application to which Anderson can be applied and it would be a matter of replacing the system of Luster with that of Anderson. Both references recite the use of camera for imaging which is further coupled to the image processing elements and both references recites a mass storage (memory) space which can store programs to program the system and both references teach that their systems can be connected to a host computer to control the system externally.

Regarding **claim 3**, the limitations of **claim 3** are met by Anderson and have been explained in the rejection of claim 1.

Regarding **claim 4**, the limitations of claim 4 are met by Anderson and Luster as applied to claim 1 above. Claim 4 also recites “the human/machine interface device comprises a personal digital assistant (PDA)” instead of a computer as in claim 1. Anderson discloses in lines 34-38 of column 9 that a human/machine interface device can be a personal computer, wireless PCS phone or a network computer and in fact these devices are capable of displaying image data and information in web-browser-compatible image format. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the invention of Anderson. One would have been motivated to use a PDA in place of a computer, where PDA is a small hand-held computer which recites a hard disk and sufficient RAM and is capable of receiving wired and wireless signals and displaying image data and information in web-browser compatible form as human/machine interface device.

**Claim 5** recites “the human/machine interface as set forth in claim 4 wherein the communication interface includes support for data transmission to a PDA over one of a wireless link and a cable link”. Anderson in lines 64-65 of column 11 teaches the communication to the human/machine can be done through USB, IEEE1394 and infrared link where USB and IEEE1394 are cable links and infrared link is a wireless link.

Regarding the **claim 11**, the limitations of claim 11 are met by Anderson and Luster as applied to claim 4 above.



**Claim 12** recites a method steps that correspond to the apparatus defined by claim 1, and is thus met by the combination of Anderson and Luster as applied to claim 1 above.

**Claim 18** recites “the method as set forth in claim 12 further comprising communicating control information to a remote device through the communication interface so as to direct a device function in accordance with a predetermined instruction of the machine vision tool”. Luster discloses that a host computer 62 of the system 40 may be a PC having sufficient amount of RAM and hard disk space for controlling the system (figure 7; col. 5, lines 15-17) which implies that the machine vision system can be controlled through a computer system that has hard disk and enough RAM and it would be obvious that a **remote computer cannot control the system without a predetermined instruction of the machine vision tool on the remote PC.**

Regarding the **claim 19**, the limitations of claim 19 are met by Anderson and Luster as applied to claim 12 above.

**Claim 20** recites a method steps that correspond to the apparatus defined by claim 4, and is thus met by the combination of Anderson and Luster as applied to claim 1 above.

Regarding **claim 21**, the limitations of claim 21 in combination with claim 20 are met by Anderson and Luster as applied to claim 5 above.

**Claim 24** has been similarly analyzed and rejected as per claim 18.

**Regarding claim 28**, Anderson and Luster meet the limitations of claim 28 as applied to claim 20 above.

**Regarding claim 29**, all the limitations recited in claim 29 have been similarly analyzed and rejected as per claim 1. However, emphasizing on the limitation “the machine vision tool including a camera for collecting image data of an object, wherein the image data includes evaluation of the object”. Anderson as discussed in the rejection of claim 1, discloses a digital camera that captures images and saves them on the memory built inside the camera. Anderson further discloses that image data captured can be used for evaluation of an object (detecting the motion of an intruder by performing comparison of successive images to detect changes between them) (col. 11, lines 4-15).

7. Claims 6 and 23 are rejected under 103(a) as being unpatentable over Anderson U.S. Patent No. 6,567,122 in view of Luster, U.S. Patent No. 5,715,051 and further in view of Cadjan, January 2000, publication “Upgrading Novell Client software across the network using acu.exe”.

**Claim 6** recites “human/machine device, includes a generic machine vision application residing thereon and the processing element is adapted to install a specialized machine vision application over the communication interface to the human/machine interface device”. Anderson in lines 52-55 of column 6 and lines 1-5 of column 7 discloses software programs to control the operations of the camera that are stored in the memory. Anderson also discloses in lines 36-43 of column 15 that parameters of these software applications running inside the camera can be changed according to the user needs. It is in fact clear from the above arguments that if a user wants to change parameters of application program running inside the apparatus according to his/her control

needs, the user has to write some kind of script or some kind of program on another external computing device such as another computer, which then can be then transferred to the apparatus's memory through communication interface. The image apparatus will only understand this script if the image apparatus and external computing device share the same platform of the application in which the script was constructed or vice-versa. Therefore, it would be obvious that the same generic machine vision software application in which the script runs should be resided on both image apparatus and external computing device. Anderson and Luster do not teach the limitation "the processing element is adapted to install a specialized machine vision application over the communication interface to the human/machine interface device".

Cadjan in her technical paper discloses a server/client model of Novell Network where the client gets upgraded automatically when client logs in to the network. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Anderson in view of Luster and in further view of Cadjan. One would have been motivated to host a file server in the image apparatus where the machine vision application resides and if a machine vision application was upgraded on the image apparatus, the server would install this special new/upgraded machine vision application on the client (PDA) automatically whenever client talks to the image apparatus.

Regarding the **claim 23**, the limitations of claim 23 in combination with claim 20 are met by Anderson and Luster and in further view of Cadjan as applied to claim 6 above.

8. Claims 7 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over, Anderson U.S. Patent No. 6,567,122 in view of Luster, U.S. Patent No. 5,715,051 and further in view of Takagi, U.S. Patent No. 6,670,991 and Bose, U.S. Patent No. 4,975,972.

**Claim 7** recites “a machine vision process that determines an intensity distribution of the image data and that transmits information with respect to the determined intensity distribution, and wherein the human/machine interface device includes a process for displaying, based upon the information, a visual representation of the intensity distribution so as to assist in adjusting at least one of the lighting intensity, shutter exposure time, lens aperture, and parameters affecting the intensity distribution in the image data”. The combined invention of Anderson and Luster do not teach the machine vision process that determines intensity distribution of the image data and transmits the information with respect to the determined intensity distribution.

Bose discloses a machine vision process in lines 22-30 of column 4 that determines an intensity distribution of the image data and the information with respect to intensity distribution can be displayed on a monitor (34). Bose does not teach of transmitting this information to another computer.

Takagi discloses of an image apparatus connected to an client computer in figure 7 and in lines 6-12 and 25-40 of column 5, lines 30-45 of column 6 and lines 10-14 of column 11 where are all camera parameters can be displayed in visual representation on the client display and client with respect to displayed parameters has the capability to change the parameters. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Anderson in view of Luster and in further view of Bose and Takagi. One would have been motivated to use the image apparatus by Anderson in view of Luster in machine vision systems where one would have used the machine vision process used by Bose to determine the intensity

distribution of the image data and one would have used the method described by Takagi to display the parameters on the client display where client can be any human/machine interface device such a computer or a PDA and client as described by Takagi can be used to change the parameters according to the user needs.

Regarding the **claim 25**, the limitations of claim 25 in combination with claim 20 are met by Anderson and Luster and in further view of Bose as applied to claim 7 above.

9. Claims 8, 9, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over, Anderson U.S. Patent No. 6,567,122 in view of Luster, U.S. Patent No. 5,715,051 and further in view of Takagi, U.S. Patent No. 6,670,991 and Bose, U.S. Patent No. 5,040,228.

**Claim 8** recites “a machine vision process that determines a relative degree of focus of the image data and that transmits encoded information with respect to the determined relative degree of focus, and wherein the human/machine interface device includes a process for displaying, based upon the encoded information, a current focus value so as to assist in adjusting focus”. Anderson and Luster does not teach the machine vision process that determines a relative degree of focus of the image data and transmits the encoded information with respect to the determined relative degree of focus.

Bose discloses a machine vision process in lines 1-20 of column 2 that determines the sharpness of focus of the image data and the information with respect to determined sharpness of focus could be displayed on a monitor. Bose does not teach of transmitting this information to another computer.

Takagi in figure 7 and in lines 6-12 and 25-40 of column 5, lines 30-45 of column 6 and lines 10-14 of column 11 discloses of an image apparatus connected to an client computer where are all camera parameters can be displayed as a function of time, distance and frequency etc., in visual representation on the client display and client with respect to displayed parameters has the capability to change the parameters. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Anderson in view of Luster and in further view of Bose and Takagi. One would have been motivated to use the image apparatus by Anderson in view of Luster in machine vision systems where one would have used the machine vision process used by Bose to determine the relative degree of focus of the image data and one would have used the method described by Takagi to display the parameters on the client display where a client can be a human/machine interface device such as a computer or a PDA and client as described by Takagi can change the parameters according to the user needs.

Regarding the **claim 9**, the limitations of claim 9 are met by Anderson and Luster in further view of Bose and Takagi as applied to claim 8 above.

Regarding the **claims 26 and 27**, the limitations of claims 26 and 27 in combination with claim 20 are met by Anderson and Luster and in further view of Bose as applied to claim 8 above.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson, U.S. Patent No. 6,567,122 in view of Luster, U.S. Patent No. 5,715,051 and further in view of Yu, U.S. Patent No. 6,804,418.

**Claim 10** recites “human/machine interface device includes a display that is insufficient in resolution and refresh rate to provide a real time display for adjusting either of focus or aperture of lens of the image element”. From the previous explained claims a PDA is used as human/machine interface device. Anderson and Luster do not teach about the resolution and refresh rate of the PDA.

Yu discloses in lines 10-15 of column 1, in lines 1-10 of column 2 and lines 45-50 of column 2 PDA display panels do not have sufficient resolution to display high-resolution images and discloses the technique for generating low-resolution images from the high-resolution images for the PDAs. A lower resolution and a lower refresh rate are the inherent properties of the PDA due to the compact size, low power operation and lower processing speed.

11. Claims 13, 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over, Anderson U.S. Patent No. 6,567,122 in view of Luster, U.S. Patent No. 5,715,051 and further in view of Nichani, U.S. Patent No. 5,673,334.

**Claims 13, 14 and 15** recites “the method of transferring configuration information from the human/machine interface device to the memory over the communications interface, wherein the step of transferring configuration information includes providing training information to the memory and wherein the step of displaying includes monitoring a live image acquired by the image element based upon the image data and information”. Anderson and Luster do not teach about configuring or providing the training to the memory of image device.

Nichani discloses a machine vision system in lines 40-50 of column 5, which is trained by an operator by transferring a training model program to the memory of the machine vision system to configure the system for future operations. Nichani also discloses in lines 9-21 of column 6 that

displaying includes monitoring a live image acquired by the image element based upon the image data and information. It would have been obvious to one having an ordinary skill in the art at the time of invention was made to modify the combined invention of Anderson and Luster in further view of Nichani. One would have been motivated to store a configuration or training program in the memory to configure the system for control operations.

**Claim 17** recites “the method as set forth in **claim 12** wherein the step of establishing the link comprises web pages on the human/machine interface based upon a web server in the machine vision system that interacts with the communication interface to convert the image data and information into web-based data packets”. As discussed before in the rejection of claims 1 and 12, the communication occurs with respect to web-based data and use of web-based data packets is well known in the art. The limitations of claim 17 are met by Anderson and Luster as applied to claim 12 above.

### ***Response to Arguments***

12. Applicant’s arguments regarding the prior art rejections under Anderson and Luster on pages 10-11 of the Amendment filed on December 13, 2005 have been fully considered but are not persuasive.

13. In the 2<sup>nd</sup> paragraph on page 11 of the Amendment, Applicant argues in substance:

**a. It would not be obvious for one skilled in the art to combine Luster and Anderson, and if combined, Luster and Anderson would not create Applicant’s invention.**



The Examiner respectfully disagrees. Examiner defines what a machine vision system is? A machine vision system is nothing but a system (computer) with a vision and such a vision is normally provided by a camera attached to the system and the system may further include some software and hardware to process the images taken by the camera and to control the camera and such software can be named as machine vision tools by one of ordinary skill in the art. As well known in the art of machine vision system and as taught by the applicant's admitted prior art, usually a machine vision system includes a camera, which is connected to a computer system located at some different location and this system located at the different location performs all the operations including installing, configuring, training, monitoring and controlling via the use of web browser windows as recited in claim 1 as admitted by applicant in applicant's admitted prior art. The only difference between applicant's admitted prior art and applicant's claimed invention as recited in claim 1 is that the computer system and the camera are built in the same unit and this single unit transmits all the data processed through its wired or wireless ports to the other computing devices such as a computer or a PDA. Examiner here cites applicant's admitted prior art to just define what the claimed invention is to better emphasize on the arguments.

The instant invention as claimed by the applicant in claim 1 and similarly other respective claims recites:

(1) a device (machine vision system) which comprises of **a camera (imaging element) coupled with a computer (computing unit) in the same unit** where computing unit further comprises of a processing element and memory,

(2) the device is loaded with software tools (machine vision tools) where these software tools would process the images (where processing of images includes compressing and reformatting and changing it into web-browser compatible format and storing the images),

- (3) the device after image processing transmits the image data in the web-browser compatible form through a human/machine interface to a human/machine interface such as computer or PDA which has a generic web-browser and screens comprise web pages,
- (4) wherein the human/machine interface (HMI) device is adapted to display the web browser compatible image data and information on a plurality of user-selected screens associated with the machine vision tool, the screens being constructed and arranged for selecting functions for at least one of installing, configuring, training, monitoring, and controlling the machine vision system,
- (5) the processing element includes a web server to allow the human/machine interface to setup and control the processor, and is further adapted to perform a machine vision tool task while HMI device is disconnected from the communications interface.

All the above claimed limitations of the instant invention have been **clearly** cited in the rejection of claim 1. As discussed in rejection of claim 1 of this office action, Anderson provides a device which comprises an imaging element coupled to image processing elements along with a mass storage device (memory) that is programmed to be used as an application server (**as a whole single unit with a camera and a server (computing unit)**) and this application server can be accessed by outer world through wired or wireless ports. As well known in the art and in view of Luster, a machine vision system is a machine that has a camera to view the object and perform image processing on the images taken by it and reproduce the images for analysis and these all functions are performed by Anderson's system (as explained in the rejection of claim 1) and Luster provides the machine vision system which has similar components as that of the system provided by Anderson, therefore it would be obvious for one of ordinary skill in the art at the time of invention was made to use Anderson's system in machine vision applications.

Also, Examiner further points to the 4<sup>th</sup> paragraph of the page 11 of the applicant's amendment filed on April 12, 2005 which recites applicant's arguments saying **"Rather this camera is basically a form of "web" camera that can be used for any purpose"**. The above cited applicant's argument clearly shows applicant's admittance that this camera can be used for any purpose and here examiner completely agrees with Applicant that Anderson's camera can be used for any imaging purpose as the camera is coupled to the **processing elements** and bulk memory as discussed in the rejection of claim 1, which is similarly done by the applicant's instant invention. Examiner further acknowledges that applicant again and again opposes to the argument of which applicant has agreed to before.

Anderson clearly shows all the structural and functional parts of the claimed invention where it processes the images and converts the image data into web-browser compatible format and transfers the image data to HMI where it is displayed in web-browser compatible format on HMI devices which further provides a control screen with control buttons on the web-page, as similarly done by the applicant's claimed invention and, based on these similarities it would be obvious for one of ordinary skill in the art to use Anderson's device in machine vision applications.

Applicant further argues **"By way of background, Anderson teaches of a webcam connected to a telephone line for broadcasting an image. The image may be controlled through a webpage, but webcam's controls are limited to frequency of images recorded, zoom, pan, tilt, and rotate the camera"** in 3<sup>rd</sup> paragraph of page 10 of the amendment filed on December 13, 2005. Examiner respectfully disagrees. Anderson clearly teaches **the camera being a digital camera** which not only performs image recording, zooming, pan, tilt and rotating but also performs **object evaluation (detecting motion of intruder by comparing the images and comparing the images would require a series of calculations)** (col. 11, lines 4-15), controlling

picture resolution (col. 11, lines 25-27), the camera performs image processing functions such as gamma correction, white balance, and color correction (col. 8, lines 27-45). Further, Anderson teaches that communication to and from the camera can be done through wired and wireless mediums (col. 11, lines 60-65). As discussed before **Anderson not only teaches the controlling of camera by a remote user but also teaches the processor how to control the system to run its own and the examples are (motion detection of an intruder; taking successive images at specified intervals after the remote user programs it)** and further explanation has been provided in the rejection of claim 1 with respect to the limitation “the processing element is adapted to perform a machine vision tool task while the human/machine interface device is disconnected from the communications interface”.

The above arguments are applicable to all the respective independent and dependent claims as recited in the instant application.

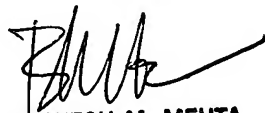
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manav Seth whose telephone number is (571) 272-7456. The examiner can normally be reached on Monday to Friday from 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manav Seth  
Art Unit 2625  
February 1, 2005

  
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